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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/479,852	01/07/2000	ELFIDO COSS JR.	2000.021100	3612

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EXAMINER

SWINDELL, WALTER R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

7/11

Office Action Summary

Application No.

09/479,852

Applicant(s)

COSS JR. ET AL.

Examiner

Walter R Swindell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☒ Claim(s) 23 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. It is noted that this application appears to claim subject matter disclosed in prior copending Application No. 09/430,475, filed October 29, 1999, and Application No. 09/430,476, also filed October 29, 1999. A reference to the prior application must be inserted as the first sentence of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). Also, the current status of all nonprovisional parent applications referenced should be included.

If the application is a utility or plant application filed on or after November 29, 2000, any claim for priority must be made during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2) and (a)(5). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) a surcharge under 37 CFR 1.17(t), and (2) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Commissioner may require additional information where there is a question whether the delay was unintentional. The petition should be directed to the Office of Petitions, Box DAC, Assistant Commissioner for Patents, Washington, DC 20231.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on May 24, 2002 was filed before the mailing date of a first office action. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

Abstract

2. The abstract of the disclosure is objected to because it is in excess of 250 words. Correction is required. See MPEP § 608.01(b).
3. The abstract contains a typographical error on line 1, --apparatus-- should be apparatus.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: sensor interface 515. A sensor interface 520 is shown in the drawings and discussed in the description. It is unclear if this is a typographical error or an omission. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: element 525. There does not appear to be any discussion of element 525 in the description. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
6. The drawings are objected to because, in FIG. 4, there is no reference number for the element coupled to elements 410 and 430 by connection 420. A proposed drawing correction or corrected

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drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

7. The above-mentioned drawing objections are further discussed below with respect to the specification. These objections are related in that they pertain to the same or similar elements.

Specification

8. The disclosure is objected to because of the following informalities:

- a. On pg. 11, lns. 8-10, element 510 is described as being contained within element 430, but is shown as being within element 525 in FIG. 5;
- b. On pg. 11, lns. 13-14, element 535 is described as being contained within element 430, but is shown as being within element 525 in FIG. 5;
- c. On pg. 11, ln. 11, element 515 is described, but as mentioned previously, this element is not shown in any of the figures.

Appropriate correction is required.

Claim Objections

9. Claim 23 objected to because of the following informalities: On line 1, the word "An" should be "A".

10. Claim 35 objected to because of the following informalities: On line 2, the word "menas" should be "means".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,002,989 to Shiba et al. (hereinafter "Shiba")(first published October 14, 1997).
13. Shiba teaches all of the features of the claimed method and system. Shiba teaches a method and system for quality control where inspection frequency of inspection apparatus is reset to minimize expected total loss based on derived frequency function and loss value.
14. Regarding claims 1-6, Shiba teaches a method for dynamically generating trace data reports in a semiconductor fabrication process employing fault detection control including: receiving specified data for a trace data report, the specified data including at least one of a parameter, a trigger, and a frequency for the trace data report (col. 3, ln. 62 – col. 4, ln. 16; and FIG. 4); automatically generating from a fault detection controller a request to a report generator for the trace data report, the request including the specified data (col. 6, lns. 12-24); formulating the trace data report responsive to the request (col. 6, lns. 30-64); and returning the formulated trace data report from the report generator based on the request (col. 8, lns. 10-63). Shiba also teaches: receiving the specified data by manual input (col. 12, lns. 4-20); consulting a data store for available parameters with the data store include at least one of a database, a list, and a file, and the data store populated with the available parameters (col. 5, ln. 51 – col. 6, ln. 7); and formulating the trace data report with specified data gathered from a fabrication tool (col. 11, ln. 7 – col. 12, ln. 35).
15. Regarding claims 7-22, Shiba teaches the computer programmed method, as well as the computer-readable, program storage medium performable method, as described above with respect to claims 1-6. Shiba further teaches placing the report generator on one or more computers (FIG. 4, and col. 5, ln. 51 – col. 6, ln. 7).
16. Regarding claims 23-29, Shiba teaches a semiconductor fabrication processing system including: a fabrication tool capable of providing at least one of specified data and a trace data report (FIG. 4,

tool(s) 1; and col. 8, Ins. 52-62); a fault detection controller implementing a fault detection control, the fault detection controller being capable of automatically generating a request for the trace data report, the request including the specified data (FIG. 4, controller 4; and col. 6, Ins. 12-24); a report generator capable of requesting at least one of the specified data and the trace data report from the fabrication tool and capable of, if the specified data is requested from the fabrication tool, providing the trace data report (FIG. 4, generator 6; and col. 6, Ins. 30-64); and an operator interface for receiving specified data from the trace data report, the specified data including at least one of a parameter, a trigger, and a frequency for the trace data report, and to which the trace data report may be returned from at least one of the report generator and the fabrication tool (FIG. 4, interface 7; and col. 8, Ins. 10-63, and FIGs. 5-8). Shiba also teaches displaying using a graphical user interface (see FIGs. 9-18); using a data store and populating the data store (col. 3, In. 62 – col. 4, In. 16); and employing the system on one or more computers (see FIG. 4).

17. Regarding claims 30-36, Shiba teaches an advanced process control system with means as described above with respect to claims 23-29.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. US Patent No. 5,341,304 to Sakamoto et al. teaches a production process administration system that checks for defects, determines proper corrections, and maintains data future instructions.

b. US Patent No. 5,196,997 to Kurtzberg et al. teaches a method and system for quality measure driven process control that uses parameters to check for defects, stores the defect information, and adjusts processes to improve output.

c. US Patent No. 5,121,335 to Barouch et al. teaches a method and system for verifying microcircuit fabrication procedures that measures production data with specification data to determine defects, records the measurements, and verifies process performance.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter R Swindell whose telephone number is (703)305-8580. The examiner can normally be reached on Monday - Friday 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703)308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Walter R. Swindell
Asst. Examiner
Art Unit 2125

WRS
October 18, 2002

A handwritten signature in black ink, appearing to read 'L. P. Picard', written diagonally across the page.

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100